







Green Training Through Partnerships

May 11, 2009











Pat Graves Delta College Director of Business Partnerships





Jennifer Hayes Dow Chemical Company Dow Michigan Operations Learning Specialist





Dave Herrala
Dow Chemical Company
Regional Learning Leader





Ed Oberski Great Lakes Bay Michigan Works! Chief Executive Officer



Delta Overview – Fall 2008

- 10,924 students
- 41% of students enrolled full-time
- 19% of students are first-time college students
- 3% of students (322) are dual enrolled high school students
- 16% of students are ethnic minority
- 66% of students are aged 24 or below
- 87% of students reside in the Great Lakes Bay Region



Career and Workforce Programs

- 56% declared a major to enter the workforce
- 95% of career program graduates are employed
- 12,400 employees of 47 companies Corporate Services
- Nation's "Top 20" providers of business training



Great Lakes Bay Region Major Chemical Industry Employers



Dow Chemical

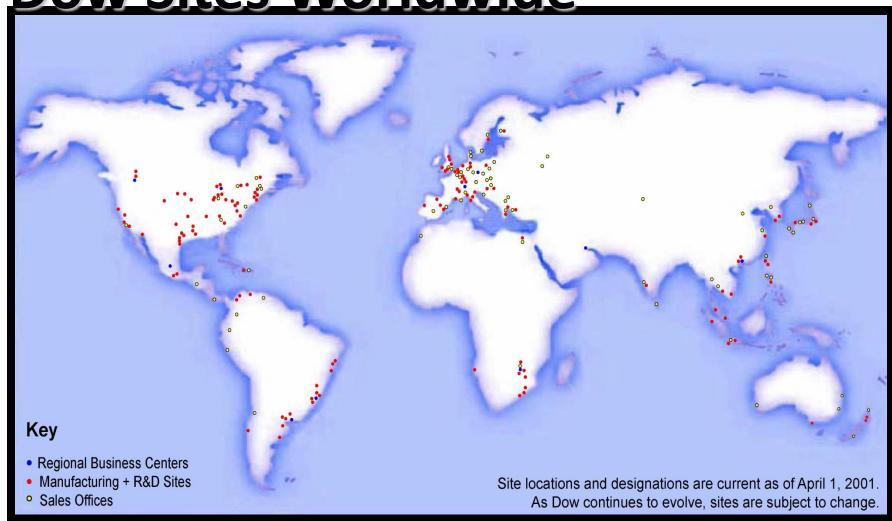


Dow Corning



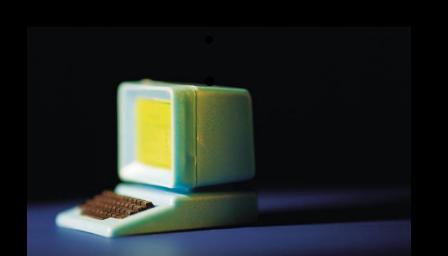
Hemlock Semiconductor

Dow Sites Worldwide



Michigan Operations

- Niche/Value Proposition
 - Location has driven an evolution to Specialty/Performance type products
 - Higher Tech & meeting human needs
 - Strong infrastructure
 - Access to R&D
 - Brownfield designation/Renaissance Zone



2000 Dow employees800 Operating Technicians40 businesses

Dow Corning Corporation

- Global leader in silicon-based technology and innovation
- World leader in silicon products research
- Joint venture between Corning Glass Works and the Dow Chemical Company
- Over 7,000 products and services for over 25,000 global customers



Hemlock Semiconductor

- Global leader in ultra-high-purity polycrystalline silicon for semiconductor and photovoltaic applications
- Joint venture of the Dow Corning Corporation, Shin-Etsu Handotai and Mitsubishi Materials Corporation
- Over 1,000 employees
- Three major expansions in Michigan and additional site in Tennessee



Twenty
Five (25)
MWA's
in the
State of
Michigan



Great Lakes Bay Michigan Works! Mission Statement

To strengthen the local economy:

- By providing assistance to employers that reduces their time, effort, cost and uncertainty in hiring and retaining qualified employees
- By increasing the skills and marketability of the local labor force to meet the needs of employers; and
- By coordinating with various partner agencies to maximize these services



Great Lakes Bay Michigan Works! Assists the Chemical Industry

- Assistance with the Michigan Talent Bank
- Specialized recruitment
- Off site interview facilities
- WorkKeys Assessments and Training
- No Worker Left Behind Training
- Incumbent Worker Training









Chemical Process Technology







Initial Program Developed with MTU

- Started in 1995
- National Science Foundation \$\$
- Chemical Engineering degree MTU



Dow's Michigan Operations Talent

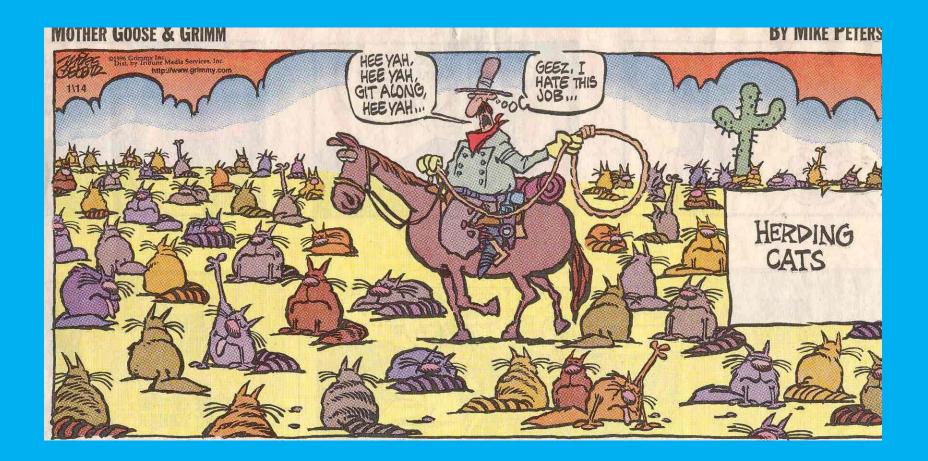
 Michigan Operations is committed to the vision that we today need post secondary level talent (AAS), where secondary level qualifications were once sufficient.
 Businesses, geographies, and individuals cannot compete globally or long term without advanced skills



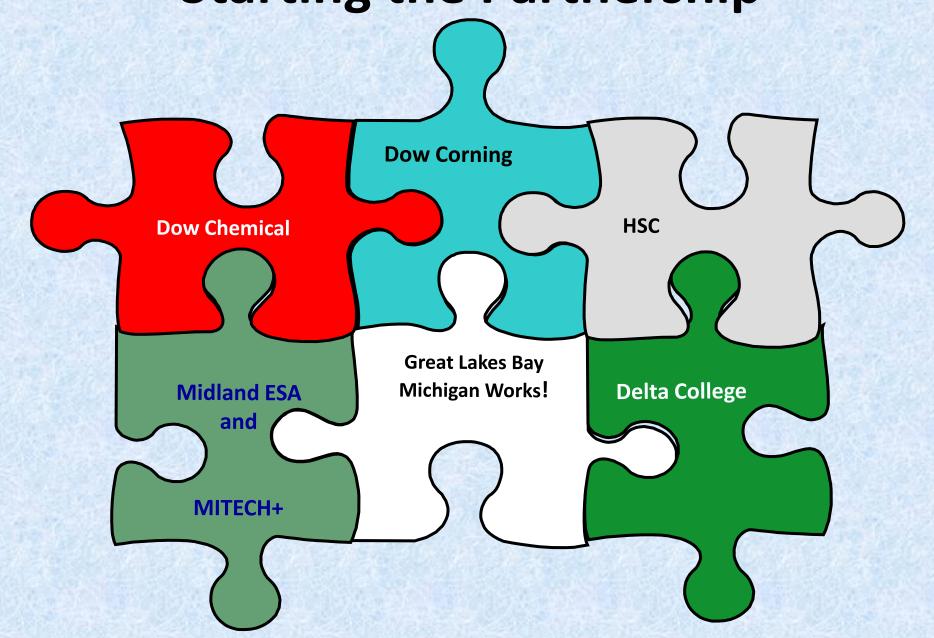
21st Century Qualifications

- ▶ Credentials for 21st Century Process Technician
 - Gold ACT WorkKeys® CRC from secondary or workforce system, achieve Dow process technician WorkKeys® profile as part of post secondary AAS experience
 - Level 6 in Applied Math & Reading for Information; Level 5 in Locating Information, Applied Technology, Observation, and Teamwork
 - AAS degree in Chemical Processing Technology
 - Successfully pass CAPT PTEX™ exit exam





Starting the Partnership









June 2007 Career Awareness Event

- Industry led
- Coordinated by MITECH+
- Many Partners
- Not a Job Fair
- Outstanding Results!







Fast Start (Internal Duct tape!)

- Post hire training AAS level, 4 months
- Based on CAPT curriculum
 - ISD for adult learning
- Classroom and field components
- Strong validation and behavioral assessment



Fast Start Results

75% passed national CAPT PTEX certification

- Strong correlation with ACT WorkKeys Scores
- Delta evaluation awarded 25 academic credits

Established partnership for donation/transfer









Fast Start Partnership

- Operated when employment demand requires
- Fast Start 16-week, 480-hour accelerated program
- Previous college, training, work experience
- Award academic credit













Program Outcomes

- 17 candidates started and completed
- 16 completed all academic requirements
- 75% employed at program completion







Fast Start









Program Recommendations

- Partners evaluate
- High satisfaction with applicants "hitting the target"
- Ongoing assessment and program revisions













Fast Start #2

- Average WorkKeys Scores:
 - Applied Mathematics 6.8
 - Reading for Information 6.7
 - Locating Information 5.7
 - Applied Technology 4.6
 - Observation 5.4
 - Teamwork 4.7









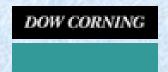




Fast Start #2

- Educational Attainment:
 - 10 bachelor's degrees
 - 6 associate degrees
 - 2 journeyman/apprentices
 - 3 military/technical training













Fast Start #2

- Work Experience
 - 19 manufacturing experience
 - 5 other technical experience
- Other Characteristics
 - 6 veterans
 - 4 females













Keys to Partnership Success

- All partners actively participate
- Open and honest communication
- Mutual respect and professional friendship
- Regional commitment and joint resources
- Agility to respond







Governor Granholm's Visit









Future Partnerships







Michigan Solar Advantage







Hemlock Semiconductor



- \$1 billion expansion in Hemlock
- Create additional 300 jobs
- 10 mile anchor zone established for solar supply chain



DOW CORNING

Dow Corning

- Constructed Solar
 Solutions
 Application Center
- Develop, evaluate, pilot, and manufacture solar solutions



Dow Chemical



- Dow Solar Solutions
- \$50 million investment in "building integrated photovoltaic" systems



perations

Human Element – Our Products

Renewable resources - Green!

- Dow Water Solutions Ion exchange, membranes- clean water and separation technology
- Photovoltaics- solar roof shingles/lights
- Diesel Particulate Filters ceramic filter medium for cleaner emissions

Human Element – Our Products

Renewable resources - Green!

- Styrene Polymers lighter, stronger plastic for vehicles for better fuel economy
- Agricultural Products- biotechnology, fermentation for biodegradable and non hazardous insecticides
- Batteries for automotive !!!?????

Other Employers

- Evergreen Solar-\$50 million manufacturing facility investment to produce components for STRING RIBBONTM wafer solar cells
- Carbone of America
- QuadSil, Inc.-silicone solutions
- Merrill Technologies-computer controlled metal fabrication
- Fulcrum Composites-manufacturer of advanced sandwich panels and composite structures

"Think Blue Sky"

Questions

